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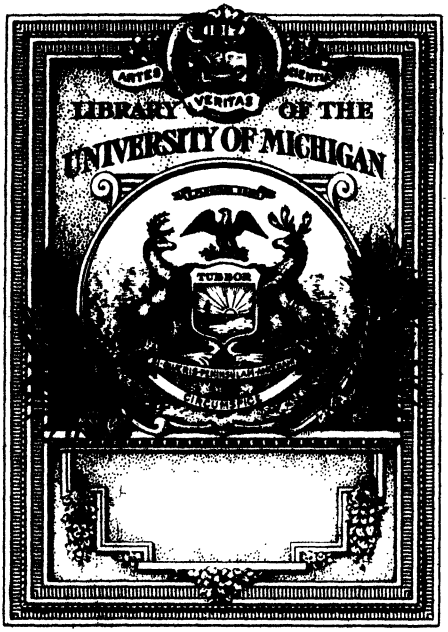

FEBRUARY 15. YEAR 1915

The AMERICAN DENTAL JOURNAL

BERNARD J. CIGRAND, M. S., D. D. S.
Editor & Publisher & Proprietor.

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Vol. 12 ~~January~~ Feb. 1915 No. X 8

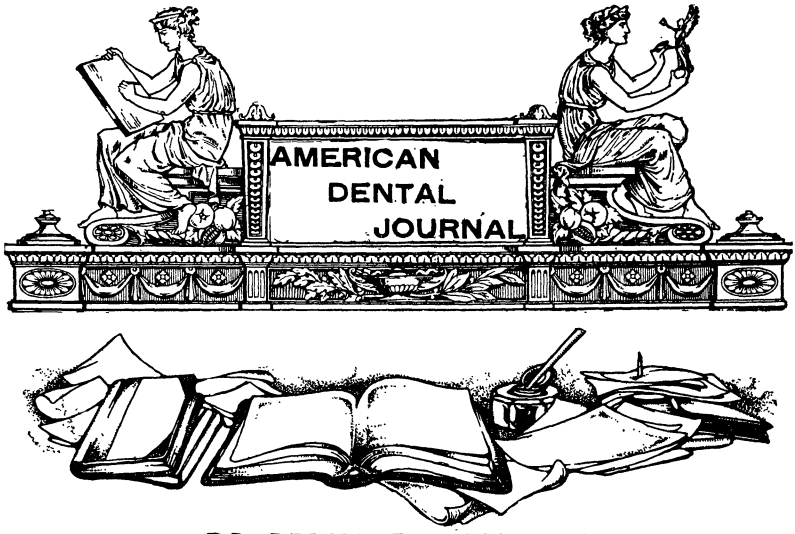
TABLE OF CONTENTS

EDITORIAL— PAGE

Professional Injustice to Aged Practitioners 363
Comment 368

ORIGINAL CONTRIBUTIONS—

The Possible Relationship Between Dental Cysts and Tuberculosis. By Dr. Victor Frey 371
Dentistry and Its New Provinces. By Charles Eliot, LL.D 372
Endamebric Pyorrhea and Its Complications. By J. S. Evans, M.D., and William S. Middleton, M.D., Madison, Wis 374
The Harrison Anti-Narcotic Bill which Took Effect March 1st 384
Memorial Resolutions—Dr. John Crouse 389
Easter Gown Feathers 392



DR. BERNARD J. CIGRAND
EDITOR * * PUBLISHER * * PROPRIETOR

ENTERED AS SECOND-CLASS MATTER AT BATAVIA, ILL.

Feb. 15 EDITORIAL AND COMMENT 1915

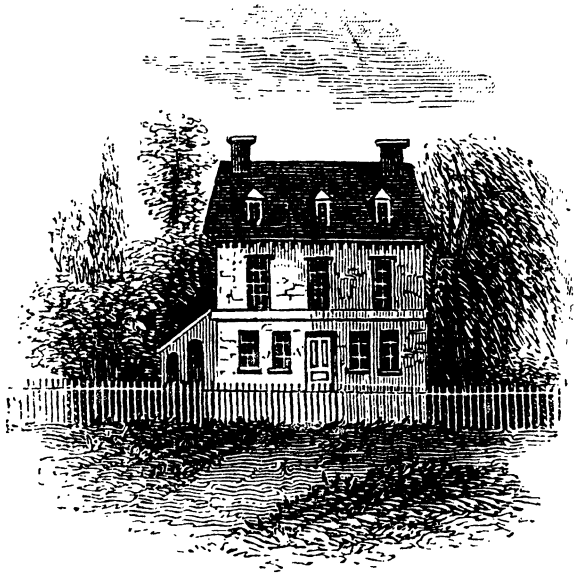
PROFESSIONAL INJUSTICE TO AGED PRACTITIONERS

The title of this editorial may not appeal to the younger readers, still if Providence is kind to them why they too may some day be classed with the venerable and the aged.

While your editor still lingers at the "halfway house," being neither young or aged, he cannot be accused of being selfish in what he has to offer, and he cannot be denounced for his criticism, since this editorial does not aim to be personal, but purposes correcting a professional wrong.

My mail contains so many requests for aid to aged and venerable practitioners that I am sad at heart to confess that our profession does not generally yield that affluence which the world credits us with. It is not my intention here or now to enter into the causes which usually make our aged practitioners

needy—be it from a lack of economy, be it because a love of the entertainment, be it because of poor judgment in investing, or be it because of illness in the family—it nevertheless remains as a cold, clear, and unwelcome truth, that dental practitioners who have lead ethical, unselfish, useful and earnest, honest lives, fail in their evening of life to possess the comfort which goes with the remark, "He's well to do." No! the story usually runs: He was a faithful practitioner, always attended



No Matter How Humble—The aged dentist too, has memories
He also has ambitions even if he is growing old.

the state meetings, contributed freely to clinics, educated his children, never loafed, and while he lead a praisworthy life as a citizen, yet now while he should be crowned with a shower of good things, his friends are eager at the fraternities and societies "raising a few dollars for the very man who never shirked a duty or asked others to carry his load." We lament! 'Tis a pity! But it is true!

Where is the professional mistake and what is wrong with

the system? Oh! a thousand causes might be given and an additional thousand to fit the remaining causes, but the condition and not the theory now confronts us and it sure is not to the credit of our profession to be obliged to support our aged, nor should the public asylums swallow up these venerable and worthy practitioners. Well, some say all the professions have "Old Man's Homes," where they get the comfort of life by the hands of mercy and charity. This sounds fine, reads nice, but in fact it is downright cold, clamy and uninviting, for no real man, aged and venerable, deserves to go to an asylum, no matter how beautiful may be the grounds, or how magnificent may be the buildings, and how pure the food, or how kind the attendants. All human feeling rebells against the idea of being kept at public or private expense. We all long to be free, and without alms all our lives. None court the hand of "here's a bite to eat," or much less the thought that "into the gates of the poorhouse and leave all hopes behind." Sad comment upon a profession which boasts of unequalled progress, and unequalled human charity. With all this credit to the profession, to have it climaxed with the comment, the dutiful and loyal ethical practitioners usually are in dire need in the last years of their lives, does not seem just right.

Now this editorial hopes to serve a double purpose, namely a warning to the younger men to carefully provide against such personal a need and to give a suggestion for relief to many who are now getting into the sixties, when the skies sometimes are beflecked with clouds and the fires of energy within the body are growing gradually less combustible.

Having watched this trend of the aged practitioners and assisted various local and national committees to lend aid to our venerables, whose names have thus far been a sacred secret, I hope to suggest in this editorial a correction in our treatment of these worthy people as shall be a real and not a disguised blessing.

There are now thousands of aged practitioners in our country who, while they require aid, yet reluctantly seek such favor at the hands of any persons or organizations; but as time creeps

on and the income grows less it is only a question of months—possibly years when they stagger into the arms of some institution. Thousands of dentists with gloomy prospects in their respective locality, would cheerfully leave their present place of practice, journey to some other state where possibly a son or daughter is residing, but they are fearful of taking that state board examination and hence, away from relatives he continues to work out an existence at the old stand, which no longer brings to him the "coin of the realm."

The thing to do and which should be done with all speed is for the state boards of dental examiners to arrange a plan of diploma recognition which will with some equity permit these

HOME FOR AGED AND DEBILITATED DENTISTS

elderly ones to go to different parts of the nation and practice where they please.

Those from New York can come to Illinois and our elderly ones can go back to their homesteads in New York. No particular state would be flooded and any community which would oppose the transfer would certainly be unkind and uncharitable.

With this change to a new location among old friends and relations the burden to the professional honor would be less and the possibility would be that the elderly practitioner would build up a new practice which would be a financial comfort to him and a joy to his new patrons.

In any event, such a proceedure, which admits of the elderly man earning his living, remaining independent and usefully employing the last years of his life is by far more humane than

to say to him: "You have outgrown your usefulness, you could not possibly pass an examination of even a freshman student, we advise that you go to some quiet place and the profession will send you occasionally a 'V'."

The elderly practitioner may not be able to pass the theoretical examination but he might be more capable to do the right, the logical and the proper thing by the average patient, and with more credit to his calling than the recent graduate, who, while he possesses a major part of the art and science, has not yet that all important minor part—experience.

Any man who has honorably practiced dentistry for five years in a state or territory of the union, and having graduated from a reputable college and received a license from a reputable board of dental examiners, should upon paying a fee of five dollars be permitted to open his office in any state or territory where floats the flag of our country.

This would be fair and just and none but honorable and worthy practitioners would be accepted, and a wrong would be corrected and the national relief committee could still go on collecting for such of our profession as are disabled or incapable of dental practice.

It affords me pleasure to append to this editorial the following received from Drs. E. S. Gaylord, James McManus, W. T. Chambers and L. G. Noel, who have been appointed a National Relief Fund Committee and whose good work and service would be augmented I am sure, if my editorial suggestions could be made to come true. The AMERICAN DENTAL JOURNAL has devoted more space editorially to the problem of Inter state Diploma Recognition than all the other dental periodicals combined.

The National Relief Fund Committee has asked me to publish their request, and it is in part as follows:

"We were handicapped last year, first by delay in having our design satisfactorily printed, stoppage by Post Master General, and much clerical expense, so we were unable to get the Seals in the hands of our members until about the first of December. However, with all our disadvantage, we brought our

Fund up to $9,620. Profiting by our experience, this year our expense will be *nil*, and the Seals can now be had at the Dental Supply Houses, or at this office.

"The necessity of a Relief Fund if made more manifest by repeated appeals to your Committee by members who are suf fering for the necessities of life; surely we should this year, by our large increase in number, easily increase this Fund by purchase of Seals, and annual contributions which we are about to solicit, up to a sum, not less than thirty thousand dollars; then from accrued interest we could begin to respond to these calls from our unfortunate—and its no exaggeration—when we say—suffering members.

"Brothers, a little from each will accomplish this much desired ideal. Will you do it?

E. S. GAYLORD, Chairman
National Dental Relief Fund Committee
Office, 63 Trumbull Street, New Haven, Connecticut."

If you have additional good arguments on the subject of Inter-state Diploma Recognition, let me hear from you; due credit will be accorded you for any good suggestions. Pope said:

"In Faith and Hope the world will disagree,
But all mankind's concern is charity."

But let us add that the prevention of the necessity of giving charity is wisdom, and no real man desires to live from others' labors.

COMMENT

DURING the past weeks your editor has been in receipt of most encouraging letters from the readers in various sections of the country. It would be ungrateful, indeed, if I did not acknowledge these letters of appreciation, many covering several pages of matter, and every one of these messages of kindness containing remittances of from one to five dollars; and, best of all, they expressed the pleasure of seeing an independent journal continue without alteration in the policy pursued during the past five years. I regret not being able

(because of lack of time) to write all the good supporters a personal letter, but please accept this brief comment as directed to you individually, and know that my good wishes and hearty thanks go to you collectively. These earnest readers and progressive practitioners deserve mentioning:

Drs. J. M. Bishoff, Stevens Point, Wis.; A. C. Bartholomew, Chicago, Ill.; S. F. Wilhelmi, Joliet, Ill.; Dr. H. E. Bliler, Chicago, Ill.; F. L. Bassett, Philadelphia, Pa.; Harry Copley, Joliet, Ill.; Kent T. Wood, Madison, Wis.; George Walter Dittmar, Chicago, Ill.; Joseph Noll, Philadelphia, Pa.; George D. Ament, Yorkville, Ill.; George W. Wilson, Aurora, Ill.; J. W. Bond, Goodland, Ind.; C. C. Richardson, New York City; M. Eckerson, Clark, S. D.; R. B. Driver, Philip, S. D.; C. N. Tromplan, Chicago, Ill.; J. H. Prothero, Chicago, Ill.; Carl B. Miller, Cedar Rapids, Iowa; B. H. Quinn, Whitinsville, Mass.; A. T. Cantervall, Boston, Mass.; W. O. Robinson, Tyndall, S. D.; J. R. Cruise, Chicago, Ill.; C. M. Barnes, Albion, Pa.; A. T. Freeman, Boston, Mass.; O. M. Daymude, Chicago, Ill.; Roy Wyman, Salem, S. D.; S. C. Durham, Reed City, Mich.; E. C. Briggs, Boston, Mass.; I. B. Clendenen, Chicago, Ill.; F. G. Varney, Barry, Ill.; Edmund Noyes, Chicago, Ill.; Martin Opheim, Chicago, Ill.; Clare Granger, Belvidere, Ill.; J. W. Evans, Clarendon, Texas; R. L. Garber, Peoria, Ill.; E. Cutrera, Chicago, Ill.; S. J. Clark, Irving Park, Ill.; G. H. Payne, Boston, Mass.; J. J. Flanigan, Chicago, Ill.; Edmund Kreis, Terrill, Iowa; W. G. Coffey, Wheaton, Ill.; F. A. Weld, Belvidere, Ill.; P. L. Smith, DeKalb, Ill.; Dr. L. L. Funk, Chicago, Ill.; Donald M. Gallie, Chicago, Ill.; G. M. Brunson, Joliet, Ill.

* * *

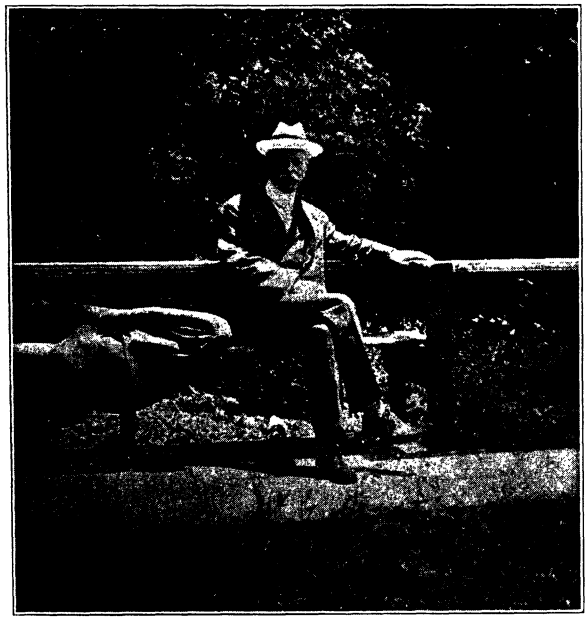
If you are actually and earnestly interested in this independent and progressive dental journal, send one dollar to Dr. B. J. Cigrand, Editor, Batavia, Ill. And if you will send the subscription of all other journals, dental or general, deduct 6 per cent and send it, and you will be lending strength to the influence of the AMERICAN DENTAL JOURNAL and be saving 6 per cent on your money. The latter item only concerns dentists who have business abilities, of which, it is claimed, there

are only a few. Send in your subscriptions and help to disprove the accusation.

* * *

MR. WILLIAM A. WILDE, business manager of the *Dental Review*, has passed to his reward. His death will be felt as a shock to all Illinoisans. Dr. C. N. Johnson has said:

"In all the realm of human kind there never was a man who meant better than he; nor one who came nearer to living up to the best he knew. To do a mean or underhanded thing



WILLIAM ALFRED WILDE

was as foreign to his nature as to turn his back on the flowers which he loved so well. It is a pleasure to associate with such men as he. It is a loss when they are taken from us; and the recompense is only in remembering the good they did, and in trying to be worthy of the example they set."

THE AMERICAN DENTAL JOURNAL joins the *Review* in expressing regrets and sympathies in the death of this good friend. He was born at Bloomfield, N. J., January 29, 1852.

ORIGINAL CONTRIBUTIONS

THE POSSIBLE RELATIONSHIP BETWEEN DENTAL CYSTS AND TUBERCULOSIS

BY DR. VICTOR FREY

[La Odontologia Argentina, Buenos Aires, gives us this good article.—ED.]

An interesting series of investigations by Dr. Frey has led him to formulate the following conclusions:

1. The bacillus of tuberculosis has been irrefutably demonstrated in the contents of dental cysts.

2. The infection of the dental cyst may originate from the rootcanal or may have entered the cyst by way of the lymphatic channels. The infection does not reach the cyst by way of the blood channel.

3. According to Hamburger almost every individual must be considered as being infected with tuberculosis. The infection occurs invariably during infancy. A weak organism succumbs to the attack, a stronger organism elaborates substances which in time bring about an auto-immunization. Where the baccilli of tuberculosis cause a new infection later in life, as in the case of radicular cysts, it may result in three ways:

(a) If the protecting substances of the body are sufficient in either quantity or quality the organism will successfully overcome the secondary pathologic focus in the dental cyst.

(b) If the organism should at the time be the seat of such additional predisposing causes as measles, scarlet fever, influenza, pregnancy, etc., the latent tubercular infection may assume the characteristics and proportions of a general tubercular infection.

(c) The bacilli of tuberculosis may in time die and may then be replaced by bacteria of a different kind.

4. In every case whenever the presence of a secondary

tuberculosis infection becomes evident, whether the infection be located in a radicular cyst or in any other limited area of the body every possible effort should be made to bring about as quickly as possible the eradication of the focus of infection, lest the localized tuberculosis become general.

DENTISTRY AND ITS NEW PROVINCES

BY CHARLES ELIOT, L. L. D.
Emeritus Pres. of Harvard

[Again I submit an article from the man who has done much for dentistry. The following address he delivered at the dedication of Forsyth Dental Infirmary at Boston.—EDITOR.]

"The advance of applied science, and particularly of chemistry and physics, and bacteriology, within the past seventy years, has nowhere taken effect more advantageously than in dental medicine and the dental art. American inventiveness took effect chiefly on the tools and mechanical processes of dentistry. German chemical science made valuable additions to the materials with which teeth are filled, or stopped, as the British say; and the electric current made possible the use of machine drills, burs, and polishers on the teeth. Bacteriology has shed a flood of light on the processes of inflamation and suppuration and on the methods of contagion or infection; both chemistry and physics have supplied various means of preventing or diminishing pain in dental operation; and the electric light has made it possible to perform dental operations during a much larger portion of the twenty-four hours than was formerly possible. Moreover these new resources of dentistry have spread over the civilized world, so that in all parts of the Orient, as well as the Occident, you may find admirably equipped dental offices where all dental work can be done with the appliances and materials which are nowadays found in the best American dental offices. I have never seen in any city a more perfectly equipped dental laboratory than I saw two and one-half years ago in Tientsin, China. To be sure, it belonged to an American dentist; but all the nations that are represented

in the treaty port Tientsin, including the Chinese, availed themselves of the skill and equipment of this American dentist.

"The field of work for the dentist has been much extended during the last twenty years. The most skilful dentists now operate on many portions of the mouth besides the teeth. The remedying of cleft palate has become a dental specialty; and broken jaws are now dealt with in large hospitals by dentists, rather than ordinary surgeons. The dentist's means of diagnosis have also been greatly improved; and no medical or surgical practitioner is more helped by the X-rays than the dental practitioner in serious cases of malformation or injury.

"These improvements in the science and art of dentistry have enabled the profession to do for individuals much more than they were formerly able to do for the prevention of pain and discomfort, the preservation of health and the prolongation of life; but simultaneously with this larger possibility of service has gone the greater cost of the service; so that the skilful treatment of the teeth from childhood to age has become more and more the privilege of the well to do, the poor being unable to pay for the costly labors of the accomplished dentist. A clear perception of the deprivations which the less fortunate or successful portion of the community suffers in this respect has led to the establishment and endowment of this Forsyth Dental Infirmary for Children. In this beautiful and perfectly equipped building the children of persons whose earnings are not much more than sufficient to cover the ordinary expenses of their family are to obtain, at merely nominal cost, as skilful dental service as the well-to-do can buy for their children, and through the services of trained dental nurses the persons responsible at home for the children here treated will be taught how to keep the children's mouths in as good order as their general health permits. In my view the teaching function of this institution will be the most telling part of its total work. It is well to put a child's teeth in good order for once and at the moment the child leaves the dental chair; but it is better to teach the mother or the sister at home how to keep that child's mouth in good order. The conservative ends of modern den-

tistry cannot be fulfilled without the following-up method of the modern hospital. The addition to a dispensary or an outpatient department of a hospital of that kind of social service which follows up the patients, teaches somebody at home the continuous treatment which should be administered and sees that the patient returns to the hospital or dispensary again and again until cure is affected, is the most important addition that has been made within my memory to hospital and dispensary practice. It will receive in this institution an admirable demonstration of its far reaching usefulness.

"This building is a monument as well as an infirmary and school. It perfectly illustrates one of the admirable traits of successful business men in the United States—the desire on their part to make use of their private earnings and accumulations to advance some beneficial public undertaking. It also illustrates fraternal love and concord. Long may it stand to speak to coming generations of these fine human qualities, and to relieve pain, promote health and prolong life.

ENDAMEBRIC PYORRHEA AND ITS COMPLICATIONS*

J. S. EVANS, M. D. AND WILLIAM S. MIDDLETON, M. D.,
MADISON, WIS.

[This article will surprise you, but good surprises do no harm. Read every word, its a valuable contribution to dental science —EDITOR]

The study of the relation of pyrrohea and oral foci of infection to systemic disorders of a probable toxic origin received a marked stimulus from the recent discovery of the causative relation of endamebae by Smith and Barrett,[1] 1914. In their study, the presence of the *Endamoeba gingivalis* Gros,[2] 1849,

*This is from the Department of Clinical Medicine, University of Wisconsin.

[1] Barrett: Dental Cosmos, August, 1914; ibid., December, 1914.

[2] The term "Endamoeba gengivalis" Gros, 1849, is substituted for "Endamoeba buccalis," Prowazek, 1914, at the suggestion of Dr. Allen J. Smith, whose studies of the original articles prove beyond a doubt the priority and accuracy of Gros' description and observations.

was constant in forty-six cases of pyorrhea. The independent works of Chiavero[3] and Bass and Johns[4] corroborate the constancy of this finding in gingival infections.

Prior to this investigation, the extensive clinical and experimental reserch in the subject of oral sepsis had shed considerable light on its relation as a distant focus for systemic toxemias. Hunter[5] had long advanced the theory of an oral septic origin for numerous systemic disturbances, more notably, pernicious anemia. More recently, Billings, Rosenow and others had emphasized the importonce of oral sepsis as a factor in remote general conditions. The efficacy of autogenous bacterial vaccines had been tested, and the variability of results both locally and generally had opened the question of a possible complexity of causative factors.

The application of the specific drug for the treatment of amebic dysentery, ipecacuanha or its active principle, emetin (alkaloid), to the treatment of an analogous condition in the mouth, was the next rapid step in our knowledge of pyorrhea. Two modes of procedure have been followed. The first, that of Smith and Barrett, was the local injection or application to the affected gums of a weak emetin hydrochlorid solution. At first a one per cent solution of the hydrochlorid proved irritant in some cases, so that a strength of 0.5 per cent has since been administered. The customary routine has been daily injections of a small portion, often only a fraction of a drop of this solution, into each pocket. Smith and Barrett,[6] in their preliminary report, noted the marked improvement to complete cure of thirteen cases of Rigg's disease so treated. Since that time many cases of correspondingly good results have been added to their list. Several ingenious devices have been evolved to meet the demands in certain cases referred by us to dentists. The use of air pressure to separate the gum from the tooth has been of assistance in some instances (Dr. S. H. Chase). The use of blunt-pointed needles (Dr. Kent Wood) and the replacement of

[3] Chiavero, Angelo: Abstr., Dental Cosmos' September, 1914.

[4] Bass and Johns; New Orleans Med. and Surg. Jour. 1914, luxvii, 456.

[5] Hunter, Brit. Med. Jour., Nov. 19, 1904.

[6] Barrett: Dental Cosmos, August, 1914.

the hypodermic needle by a dental file (Dr. E. J. Hart), the hanging drop of emetin solution adapting itself by capillarity to the smallest pockets where no needle could be introduced, have both been valuable refinements. The application of a heavy petrolatum to the gum margin after each treatment appears of value. Barrett, in a more recent article,[7] has carefully covered the ground of the surgical dental care, which must supplement any specific treatment.

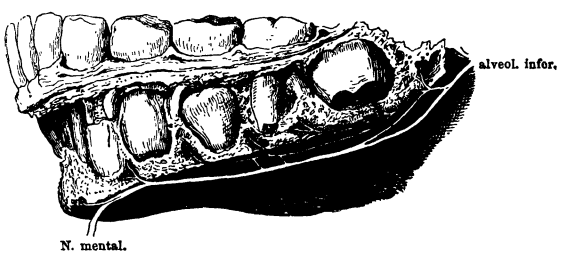
The more recent announcement of Bass and Johns of their discovery of endamebae in eighty-five out of eighty-seven cases of Rigg's disease, and of its rapid subsidence after the subcutaneous administration of emetin hydrochlorid, constitutes the proof of the efficiency of a second method of treatment or of administration of the specific drug. Smith, Middleton, and Barrett,[8] in a recent study of tonsillar endamehae and their relation to systemic disturbances, noted in several cases the disappearance of endamebae from the cryptic contents on the subcutaneous administration of emetin hydrochlorid.

The present study constitutes a brief preliminary report of a series of cases under observation in the university of Wisconsin Medical Clinic. In all, seventy-two oral cases have been examined by the usual method, heated stage, warm slide and cover slip, the material scraped from the depth of the pocket being immediately mixed with warm normal saline and mounted. Seventy cases showed endamebae ranging in size from 8 to 32 microns in diameter, filled with granular material but no contractile vacuoles; the pseudopodia varied widely in size, length and activity; the ectoplasm was decidedly hyaline, and only after an interval was there an outpouring of the granular endoplasm into the newly formed hyalin pseudoped. These amebae fall under the heading of *Endamoeba gingivalis* Gros. The type *Endamoeba kartulisi* Doflein, 1901, was associated with the *Endamoeba gingivalis* in two cases. According to the literature, the differentiation of these two types is to a great degree based on the difference in the size and activity of the pseudopods, those

[7] Barrett: Dental Cosmos, December, 1914.

[8] Smith, A. J.; Middleton, W. S., and Barrett, M. T.: The Tonsils as a Habitat of Oral Endamebas, The Journal A. M. A., Nov. 14, 1914, p. 1746.

of the *kartulisi* being much broader and more active. Of these two points there could be no doubt in the cases noted; but an added differential point was observed, namely, the refractive quality of the substance of the pseudopods of the *kartulisi* was much more marked than that of the common forms. Indeed, the difference was almost that of hyaline and waxy renal urinary casts. An unclassified ameba was noted in two cases of pernicious anemia along with the type gengivalis. This ameba possessed a definite endoplasm and ectoplasm, was from 10 to 30 microns in diameter, its pseudopodia were rapidly thrown out, frequently subdividing, but never was there noted an outflow of the very highly refractile granular endoplasm into the pseudopodia. The two negative cases showed considerable gum retraction with dentine erosion.



A point to which our observation has led us to attach considerable importance is that of the mechanical interference by metallic filling and crown or plate attachments with the normal adaptation between the crusta petrosa or cement and the gum or pericementum (ligamentum circulare dentis of Kolliker). Invariably such cases have shown pyorrhea in these localities. Whether this is a constant finding and whether the presence of an irritating foreign body determines the condition, we can not judge at this time.

Of the seventy pyorrhea cases with amebae present, fifty-four were treated by the local injection of 0.5 per cent emetin hpdrochlorid solution. The results were practically uniform in the marked improvement of the pyorrhea. The period of treatment varied from four to twelve days, with an average of about

seven. In a few instances the patients complained of "tender" gums, but the great majority remarked early in the course of their treatmeut on the new experience of an ability to brush their teeth without the pain or the bleeding noted prior to the treatment.

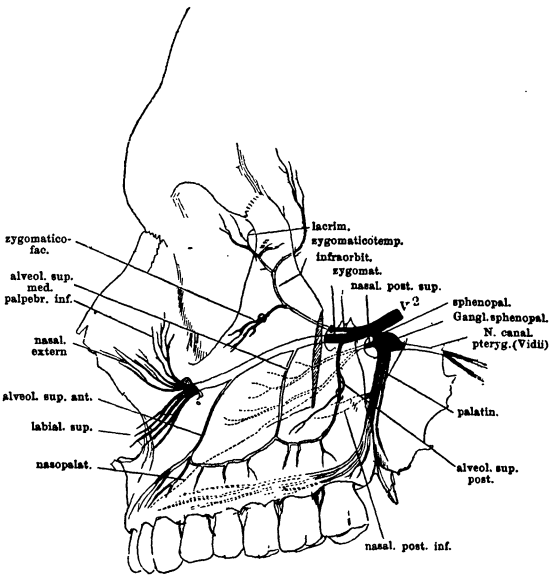
After an interval of from several days to a week following the last treatment, which corresponds to an apparent local cure, a re-examination for amebae was made. Even though the second examination was negative, as a precautionary measure, a subcutaneous course of emetin was instituted. Two plans of dosage were followed; a series of small doses daily, $\frac{1}{8}$ grain doses of the hydrochlorid for eight days or, a shorter series of larger doses, $\frac{1}{2}$ grain repeated with a day intervening followed by $\frac{1}{4}$ grain on two successive days. The reason for this supplementary treatment has been to insure the death of any endamebae penetrating the deeper tissues of the gums, and therefore possibly unscathed by the local injections. Another rational procedure would be periodic subcutaneous injections, say at monthly intervals over several months, to prevent the multiplication of encysted amebae which resist the biochemical amebicidal action of ipecac.

Only five cases have been treated with subcutaneous injections alone. The results have been entirely satisfactory, but with ambulatory cases we have not felt justified in using the rather large doses suggested by Bass and Johns. To us, this very fact constitutes a real drawback to the use of the remedy subcutaneously alone.

The constitutional manifestations associated with endamebic interstitial gingivitis are the disturbances attributable to a toxemia of any other origin. Fifty-two or 74 per cent of the seventy pyorrhea cases showing endamebae, displayed constitutional symptoms or disturbances of more or less marked degree. We have endeavored to group the constitutional derangements in these cases attributable to a toxic factor under several heads; (*a*) arthritic, (*b*) neuritic, (*c*) digestive, (*d*) hemic, and (*e*) miscellaneous.

Under these headings twenty-six individuals, 50 per cent of

the persons exhibiting constitutional symptoms or 27 per cent of the total endamebic, pyorrhea cases, showed arthritic symptoms of varying degrees, most frequently, however, of the type denoted as arthritic deformans. Six persons, 11 per cent of the total constitutionally affected, consulted us for neuritic involvements, and a similar percentage showed hemic changes. Two patients suffered from obscure digestive disturbances. The remaining thirteen individuals falls into a miscellaneous group, whose components cover a wide range. Certain of these will



be discussed individually. In such a broad general classification we have been forced to pick out the most prominent symptom of a toxic complex, and we have therefore sacrificed the complete picture for the purpose of presenting its most evident detail.

The application of a specific drug for the relief of a supposedly specific infection is an acknowledged therapeutic principle. The further application of this principle to the relief of remote conditions complicating the original specific lesion is justified. However, in this instance, we are not compelled to

assume an amebic character for the remote disturbance arising from the primary gingival focus. The mere relief of a focus of toxic absorption frequently explains the subsequent alleviation of a toxic derangement.

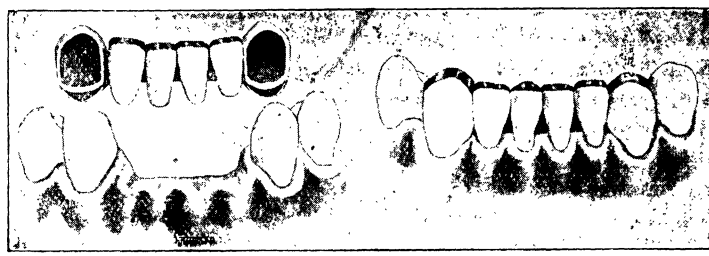
Seventeen of our twenty-six arthirtic patients have received local treatment with marked improvement or the absolute relief of the interstitial gingivitis in all cases. Of these patients, ten have experienced decided improvement subjectively in their joint symptoms; three have had but slight relief from their arthritic pain, and the remaining four have shown no definite change. Two arthirtic patients not treated locally, together with thirteen from the foregoing group undergoing local treatment (nine of these were improved and four unimproved under the local care), have been treated by the subcutaneous administration of emetin hydrochlorid. Of the four patients unimproved by local treatment of the gingival condition, none has shown maintained improvement even under the combined treatment. Two of these to the Roentgenogram show well-marked osteo-arthritis. A third is undoubledly a case of traumatic bursitis, in which the arthritis is a secondary factor, and the fourth is a very extreme long-standing case of arthritis deformans. In all, nineteen cases of arthritis have received the various forms of treatment with no apparent improvement in four cases, with indifferent results in three, but with decided unmistakable improvement in twelve cases, 63 per cent of those treated, two of these being treated by the subcutaneous method alone.

The group of neuritis cases has been disappointing because of our inability to follow the subsequent course of five of the six persons referred to dentists for local care. The only patient returning for the supplementary subcutaneous treatment has shown no change in the neuritic condition.

Of the two cases with digestive derangement as the prominent symptom complex, both were improved by local treatment, further improvement being noted in one following the administration of emetin hydrochlorid subcutaneously. In both cases malnutrition was the most important factor, though neuroses usually attributable to general toxic disturbances were mani-

fest. We believe that the improvement in these cases was due partly to the removal of a toxic focus, thereby correcting a metabolic disturbance, and partly to the betterment of the local condition in the mouth, which was followed by improved mastication and increased appetite.

The six cases with hemic disturbances included two cases of pernicious anemia, and four simple secondary anemias of rather moderate grade. We have been unfortunate in our inability to follow the pernicious anemias. One of them was started on emetin subcutaneously, but a return of a previously existing gastro-intestinal disturbance made its continuance inadvisable. A gain of up to 500,000 in the total red corpuscle count was noted in several of the secondary anemias on the removal of



ILL-FITTING BANDS PRODUCE DISORDERS

the gingival toxic focus by the emetin treatment. Similar changes in the blood picture of several cases grouped elsewhere have been noted after the subsidence of the pyorrhea.

We freely admit a question of doubt as to the etiologic relation in the group of miscellaneous conditions associated with pyorrhea. However, the relief of certain remote symptoms and conditions, which undoubtedly had a toxic focus as a basis, under the emetin treatment has led us to include the whole number. For instance, a case of obstinate uncontrollable headaches, whose source could not be discovered, responded quickly on the relief of a pyorrhea. A still more obscure case of marked splenic enlargement or tumor without a blood picture characteristic of any pathologic lesion was observed for two months without a

diagnosis and without any change in size. There was, however a most extreme pyorrhea. The local improvement in this condition under the local use of emetin hydrochlorid was attended by a reduction of the splenic tumor of 1½ inches in both the longitudinal and transverse diameters; a total reduction of over 2 inches in both diameters has followed the combined local and subcutaneous administration of the same drug. Other associated conditions noted in this miscellaneous group include accessory nasal sinusitis, endocarditis, continued unexplained leukocytosis, and the toxic cases falling under a broad, general heading of lowered nutrition and lowered general vitality. Among this type of cases only continued treatment and observation can possibly note a change of condition. Additional cases of the nature of visceral parenchymatous degeneration, as occur in the myocardium, liver and kidneys in any toxemia, will possibly be noted in the pursuance of this study.

The question of local reaction on the subcutaneous injection of emetin hydrochlorid in our cases has been most interesting. For instance, a case of arthritis whose pyorrhea has been cleared up by local treatment will show no reaction at the points of subcutaneous injection of two successive half-grain doses of emetin. On the third or fourth dose of only one fourth grain, a most marked local reaction in the form of a wide, indurated areola of inflamation about the point of injection occurs. This local reaction may be attended by a temporary exacerbation of the general symptoms, usually followed by a marked improvement. We have been led to think of this reaction as an index of a point of saturation, when, with the death of numerous amebae the strength of emetin in the blood having reached a lethal point, a great amount of bacterial and possibly amebic toxin is liberated. Of course, this explanation is tentative, and subsequent observations may rule it out, but the alleviation of the general symptoms succeeding such an occurrence strongly supports this view.

As to the manner of the production of the toxic reaction in structures remote from the gingival focus, the several explanations advanced by Smith, Middleton and Barrett[8] might be quoted:

Much must depend on the local circumstances governing absorption,

and much, too, must depend on the number and type of associated bacteria. Whatever other relation may obtain between the amebas and the accompanying vegetable micro-organisms, one may be certain that the amebas feed largely on the latter; and in this bacterial phagocytic action they doubtless set free from this and from that organism different endotoxins. Doubtless bacterial toxins thus originating play a more important part than do toxins from the amebas themselves, if there be amebic toxins.

In regard to the exact method of action of either toxin we may assume the selective action of the specific toxins to determine the system or the structure involved. In this connection, the old theory of the metabolic origin of many of the complications mentioned above may present itself in a new light. The liver is to a great degree responsible for the disposal, breaking up or removal of toxins arising within the body. It is, therefore, barely possible that certain of the systemic disorders may arise from a disturbance of the normal metabolic function of the liver. As to the hemic complications, the degrees of secondary anemia noted might readily arise from a bacterial hemolytic toxin, but our observations on the active lysis of engulfed red corpuscles in numerous instances lead us to the belief that the endamebae either through an intracellular or extracellular hemolytic toxin, or both, may be even a more important factor.

In conclusion, we would impress the facts that constitutional disturbances are very frequent complications of endamebic pyorrhea, that arthritis, particularly of the type arthritis deformans, is the most frequent complicating disorder, and that the results from the local and general administration of emetin hydrochlorid in the relief of the pyorrhea and the marked improvement of the arthritic conditions are very encouraging in a large percentage of cases. In addition, unexpected relations between pyorrhea and certain remote conditions are established through the response to the emetin treatment.

We are indebted to the clinical staff of the University of Wisconsin, to the dentists of Madison and to Dr. Allen J. Smith of the University of Pennsylvania for assistance in the treatment of this series of cases and for timely suggestions during this period of preliminary observation.

THE HARRISON ANTI-NARCOTIC BILL WHICH TOOK EFFECT MARCH 1.

[*The Dental Register* has made this digest and explanation. We take pleasure in giving it to you.—EDITOR]

As we stated in these pages recently, the Harrison Anti-narcotic Bill (H. R. 6282) was finally passed by Congress, and received the approval of President Wilson upon December 17, 1914. As provided, this bill went into effect March 1, 1915. In order that readers of *Clinical Medicine* may be thoroughly familiar with the provisions of the Act and know exactly what they must do (and what they can not do) to comply with it, we submit herewith a brief digest and explanation. The information presented is based to some extent upon regulations now being drafted by the officials of the Treasury Department. It should be understood, however, that these regulations have not been definitely determined upon and are subject to revision. Should there be any changes affecting the accuracy of this explanation, they will be presented to our readers next month.

Who are affected by the law.—"Every person who produces, imports, manufactures, compounds, deals in, dispenses, sells, distributes or gives away opium or coca leaves or any compound, manufacture, salt, derivative, or preparation thereof." This includes every physician, dentist, veterinarian and pharmacist, all of whom are specifically mentioned in the law.

With what narcotic drugs is this law concerned.—As stated above, this law affects the traffic in opium or coca leaves, and "any compound, manufacture, salt, derivative or preparation thereof." However, there are certain exemptions. Thus, de-cocainized coca leaves are exempt from the operation of the law; also (see Section 6), it is provided that "This Act shall not be construed to apply to the sale, distribution, giving away, dispensing, or possession of preparations and remedies which do not contain more than two grains of opium, or more than one-fourth of a grain of morphine, or more than one-eighth of a grain of heroin, or more than one grain of codeine, or any salt or derivative of any of them in one fluid ounce, or, if a

solid or semi-solid preparation, in one avoirdupois ounce; or to liniments, ointments, or other preparations which are prepared for external use only, except liniments, ointments, and other preparations which contain cocaine or any of its salts or alpha or beta eucaine or any of their salts or any synthetic substitute for them: *Provided*, That such remedies and preparations are sold, distributed, given away, dispensed, or possessed as medi-

THE "DOPE FIEND" GETS A HEIST

cines and not for the purpose of evading the intentions and provisions of this Act."

The effect of this exemption is to permit the sale by unregistered dealers of many socalled "patent" and "proprietary" medicines containing small quantities of opium and its derivatives. It also exempts at least one official preparation, i. e., camphorated tincture of opium (i. e., paregoric). This clause is of course a concession to the proprietary and retail drug interests.

So far as we can discover, every tablet, pill, and granule, and most of the liquid preparations containing opium or its alkaloids, fall under the operations of the law, and every physician dispensing or prescribing them will be compelled to take out a license.

The license and how it is secured.—Every physician, dentist, veterinarian and pharmacist, whether he dispenses or prescribes, must take out a license from the National Government, for which he will pay $1.00. This license must be secured from the Collector of Internal Revenue in the District in which the applicant lives or does business. To secure this license, the applicant must fill out and submit to the Collector an application blank which said Collector will supply. In this blank the physician must state his name, location, and the character of his business or profession.

When the license is issued, the applicant will be given a registry number. It is expected that this number will be a permanent one, and that when the license is issued, from year to year, the same number will go with it. Thus, John Jones, M. D., once registered as No. 456, will remain No. 456 through his life. He will be permanently identified with this register number.

First payment for license.—Inasmuch as the fiscal year of the Internal Revenue Bureau begins on July 1, it is presumed that the first payment for license will cover the period from March 1 to July 1. This would make the first expense for license approximately 34 cents; in that event, the license would have to be renewed upon July 1.

Order blanks, and routine to be followed in ordering drugs.—The law provides "That it shall be unlawful for any person to sell, barter, exchange, or give away any of the aforesaid drugs except in pursuance of a written order of the person to whom such article is sold, bartered, exchanged or given, on a form to be issued in blank for that purpose by the Commissioner of Internal Revenue. Every person who shall accept any such order, and in pursuance thereof shall sell, barter, exchange, or give away any of the aforesaid drugs, shall preserve such order for

a period of two years in such a way as to be readily accessible to inspection by any officer, agent, or employe of the Treasury Department duly authorized for that purpose, and the State, Territorial, District, Municipal, and insular officials named in section five of this Act. Every person who shall give an order as herein provided to any other person for any of the aforesaid drugs shall, at or before the time of giving such order, make or cause to be made a duplicate thereof on a form to be issued in blank for that purpose by the Commissioner of Internal Revenue, and in case of the acceptance of such order, shall preserve such duplicate for said period of two years in such a way as to be readily accessible to inspection by the officers, agents, employes, and officials hereinbefore mentioned." (Section 2.)

This means that every physician, dentist, veterinarian, pharmacist, or other dealer ordering from any person whatsoever, any of the narcotic drugs mentioned in this Act, must use in ordering them an official order blank, to be furnished by the Commissioner of Internal Revenue. These blanks will be furnished to the applicant by the local Collector of Internal Revenue. In order to secure them the doctor must make out a requisition blank which this official will supply.

The order blanks themselves must be purchased by the applicant (physician, dentist, veterinarian or pharmacist) and they will cost $1.00 a hundred. They will be made in duplicate, the price being for the 100 originals, duplicate being on the same sheet, probably as a "stub." The law requires that *the buyer* must keep the duplicate blank on file in his office subject to official inspection for a term of two years; while *the seller* must keep the original blank on file subject to inspection for a similar period. It is expected that these order blanks will be stamped with the registry number of the purchaser.

How does this Act affect the dispensing of narcotic drugs.— The law specifically provides that "nothing in this Act shall apply (a) to the dispensing and distribution of any of the aforesaid drugs to a patient by a physician, dentist or veterinary surgeon registered under this Act in the course of his profes-

sional practice only." There is, however, one restriction, as follows: "The physician, dentist or veterinary surgeon must keep a record of all such drugs dispensed or distributed, showing the amount dispensed or distributed, the date, and the name and address of the patient to whom such drugs are dispensed or distributed," *provided* he does not "personally attend" the patient for whom the drugs dispensed or distributed are designed. These records must be kept, subject to inspection, for a period of two years. There is no restriction on the possession and administration of narcotic drugs by the patient's nurse under the physician's direction.

This means that if a patient is actually under the personal care of the physician or veterinarian, the practitioner is not required to keep a reecord of the narcotic drugs used. On the other hand, if the patient is not under his direct personal care, that is, if the drugs are sent to this patient by mail or messenger after written, telephonic or telegraphic request, without prior actual personal attendance on the part of the physician, then such records must be kept; in other words, every physician doing a mail-order business, or trying to treat patients without actually seeing them, will be required to keep the full records required of all other dealers.

How the bill effects the prescribing of narcotic drugs.—It is expected that each physician prescribing any or the drugs mentioned in this Act will be required to sign his name in full to the prescription, and also to write thereon his registry number and office location. It is also expected that the pharmacist will be required to use reasonable precautions to verify the identity of the persons named on the prescription, and to prevent the drugs specified falling into the hands of improper persons. Such prescriptions must be kept (it is expected) in a separate file, for a peroid of two years. Except on prescriptions written by registered physicians, dentists and veterinary surgeons, the pharmacist is not allowed to dispense any narcotics whatever, except those specifically exempted by the Act. (See paragraph: "*With what narcotic drugs is this law concerned.*")

Inventories of narcotic drugs.—It is presumed that the Gov

ernment will require of every manufacturer, dealer and dispenser of these drugs, an inventory of the quantities of narcotics on hand at the time this law goes into operation. However, just what will be required in this connection, we are yet unable to state. We have understood that these inventories must be made by March 5; but full information will doubtless be given by the Government later. Physicians can make no mistake in putting in their stocks at once.

Penalties.—The penalties provided for the violation of this Act are very high. It is provided "That any person who violates or fails to comply with any of the requirements of this Act shall, on conviction, be fined not more than $2,000, or be imprisoned not more than five years, or both, in the discretion of the court."

This digest does not attempt to cover the Act in full, but only so much of it as may be of special importance to physicians at the present time. The requirements relative to importers, manufacturers and dealers are extremely rigid.

It will be apparent from the preceding that it will be impossible, or at least dangerous, for any physician, dentist or veterinarian to dispense or prescribe any of the narcotic drugs mentioned in this law after March 1, unless he has obtained a license and secured his registry number and other blanks. We therefore advise all practitioners to file with his local Collector of Internal Revenue, without delay, his application for license and his request for blanks. When convenient, such applications may be made personally, but if not convenient, they may be made by mail.

MEMORIAL RESOLUTIONS—DR. JOHN N. CROUSE

[The following letter speaks for itself.—EDITOR.]

DR. B. J. CIGRAND, Editor AMERICAN DENTAL JOURNAL.

Dear Doctor:—The enclosed communication explains itself. We were instructed to send it to the Dental Journals, and it will go to the AMERICAN, *Cosmos, Items of Interest, Digest, Summary, and Review.* COMMITTEE.

At the annual meeting of the Dental Protective Association, held in December 1914, being the first meeting subsequent

to the death of Dr. Crouse, a committee was appointed to prepare for publication a statement which might serve to show the appreciation of the members of the Association for the character and great services to the dental profession of Dr. J. N. Crouse, who organized the Association and was its President and executive head till shortly before his death.

Dr. Crouse displayed great ability and tremendous force of character, and enthusiasm and perseverance which finally overcame the general indifference, and much active opposition of the dental profession, and won a sufficiently numerous membership in the Protective Association to provide enough funds to resist successfully the claims of the Crown and Bridge Company. The defense was so complete that the Crown and Bridge Company never collected anything of consequence from the dental profession. If the dentists had been obliged, for a year or two at first, to pay the licenses demanded by the Crown Company as they had previously done for many years to the Goodyear Dental Vulcanite Company the great services rendered by Dr. Crouse through the Dental Protective Association would have been universally acknowledged. As it was, appreciation for his services was less in evidence than a persistent and essentially unfair complaint and criticism of Dr. Crouse personally, and of his management of the affairs of the Protective Assiciation.

It did not seem to be understood that a plan of organization similar to that of our dental societies is not well adapted to fight a legal battle. It was indispensible, as in war, that one man should be in supreme command, able to choose his own helpers and subordinates, and to command the entire resources of the Association for instant action whenever necessary. So far as appears, there was no other man in the dental profession who had the ability, and the willingness to make the personal sacrifices necessary to accomplish what he did. The value of his services to the profession can never be known, that it amounted to millions of dollars there is no room to doubt.

Dr. Crouse always took an active interest in the welfare and progress of his profession and for many years he was a

familiar figure to all who attended dental society meetings anywhere. He came to Chicago from Mount Carrol, where he was then practicing; to become one of the charter members of the Illinois State Dental Society, and for some time before his death he was the only surviving charter member who had maintained his membership continuously. He was active in the administrative affairs of the three principal societies to which he belonged—the Chicago Dental Society, the Illinois State Dental Society, and the American Dental Association (which was merged into the present National Dental Association). He was president of each of them, and was for many years a member of the executive committee of the American Dental Association.

The last important service to the Dental Protective Association was the arrangement with Dr. Taggart by which the members of the Association received licenses under his patents for a trifling sum, (less than a dollar a year for the terms of the patents). In this he had the active assistance of the other directors, Dr. C. N. Johnson and Dr. J. P. Buckley, and without all three of them the plan would probably have failed.

Dr. Crouse did not recieve in his lifetime the honor and appreciation from his profession that his great services deserved, and which will undoubtedly be accorded to him in the future He will have a place among the great benefactors of the dental profession.

EDMUND NOYES, Chairman
J. E. HINKINS,
C. E. BENTLEY,
Committee.

Many of the subscribers are sending in the names of prospective dental students. The publisher will credit you with 25 cents for each name, and this will admit of your paying a year's subscription to THE AMERICAN DENTAL JOURNAL.

With the next dental order you send to any of the large dental supply houses order THE AMERICAN DENTAL JOURNAL. One dollar per year.

The Easter Gown Feathers

Dentist—"What kind of a filling do you prefer in that front tooth."

Patient, (Hoping to avoid dental bill)—"Oh! I do not like gold, and porcelain fillings they say come out; put in a cement filling."